

KY 2010 9271588

**DEPARTMENT FOR PUBLIC HEALTH
REQUEST FOR APPROVAL**

1. Type of Document: **HIV/AIDS Surveillance Enhanced Laboratory Reporting
PS08-80203SUPPL10**

2. Justification

The purpose of these funds is to enhance the electronic laboratory reporting capability for HIV lab reports from both private and public laboratories. This grant is requesting \$72,898.98 to purchase licenses, train staff, and standardize vocabulary for HL7 lab reports. The application must be submitted electronically on grants.gov to the Centers for Disease Control and Prevention by September 2, 2010

3. Funding
State GF

Federal
Funds

x

Agency
Funds

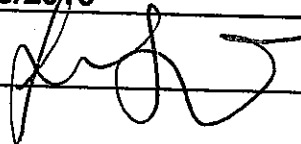
Other Funding Source
(Explain)

4. Submitted by:

Medina Tipton 8/25/2010
(Date)

5. Branch Approval

(Date)

 8-27-2010

6. Division program
contact for
corrections/questions

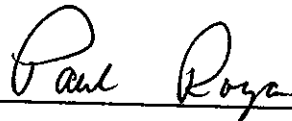
Medina Tipton
(Date)

Ext.

3233

Division Budget
Analyst if applicable

(Date)

 8-30-10

8. AFM State Budget

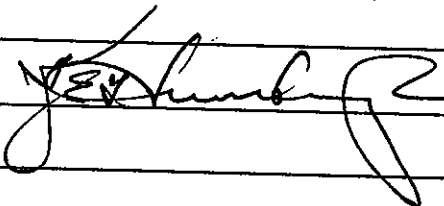
(Date)

9. AFM LHD Budget
(*LHD Contract or MOD
Only)

(Date)

10. Division Approval:

(Date)



Division contact for
document pick-up:

Kay Loftus

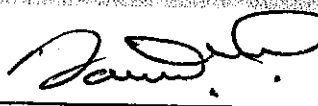
Ext.

3565

11. Contract or Modification Only: Submit to Contracts and Payments Branch

- Steps 1-10 must be complete; submit only original signatures
- Program staff may wish to scan or copy documentation before submitting
- Requests will be logged into tracking tool
- Contracts and Payments staff will submit to Commissioner's Office for approval.

**12. Commissioner's Office
Department Approval:**

 8/5/10

(Date)



STEVEN L. BESHEAR
GOVERNOR

CABINET FOR HEALTH AND FAMILY SERVICES
OFFICE OF THE SECRETARY
275 EAST MAIN STREET, 5W-A
FRANKFORT, KENTUCKY 40621
(502) 564-7042
FAX: (502) 564-7091
WWW.CHFS.KY.GOV

JANIE MILLER
SECRETARY

September 2, 2010

Louvern Asante
Grants Management Specialist
CDC Procurement and Grants Office
Department of Health and Human Services
2920 Brandywine Rd, Mail stop E-15
Atlanta, GA 30341

Re: CDC-RFA-PS08-80203SUPPL10

Dear Ms. Asante,

Please accept Kentucky's 2010 HIV/AIDS Surveillance Supplemental Funding to Funding Opportunity Announcement, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting" from the Kentucky Cabinet for Health and Family Services for Program Announcement CDC-RFA-PS08-80203SUPPL10. Funding will be used to support enhance HIV/AIDS electronic laboratory reporting.

Thank you for your assistance. For further information contact Medina Tipton, HIV/AIDS Surveillance Coordinator, at 502-564-6539, ext 3233 or medina.tipton@ky.gov.

Sincerely,

Steve Davis, MD
Deputy Commissioner

Sigga Jagne, MPA
HIV/AIDS Branch Manger

Medina Tipton, MHA
HIV/AIDS Surveillance Coordinator

Pertinent numbers applicable to the Kentucky Cabinet for Health and Family Services are included in this letter should they be needed. Those numbers are as follows: DUN AND BRADSTREET- (DUNS) - 927049767; FEDERAL WIDE ASSURANCE (FWA) - FWA00005155; INSTITUTIONAL REVIEW BOARD (IRB) - 00003595, IORG - 0002985; and FEDERAL EMPLOYER IDENTIFICATION NUMBER (FEIN) - 61-0600439.

Executive Summary of Cabinet for Health and Family Services' Grant Application

Cabinet for Health and Family Services, Department/Division as the Applicant:

Department for Public Health, Division of Epidemiology and Health Planning

Project Contact: (project manager/branch manager)

Medina Tipton, Surveillance Coordinator
502-564-6539 x 3233

Sigga Jagne, Branch Manager
502-564-6539 x 3552

Title of Grant: (description)

HIV/AIDS Surveillance

Federal Agency/Department Awarding Funding under the Grant:

Department of Health and Human Services
Centers for Disease Control and Prevention (CDC)
2920 Brandywine Rd
Atlanta, GA 30341

Federal Identifier Grant No:

PS08-80203SUPPL10

Catalog of Federal Domestic Assistance:

CFDA #93.523

Type of Grant Application:

Supplemental Application: Project and Budget Period to begin October 1, 2010; project period through December 31, 2011

Executive Summary of Cabinet for Health and Family Services Grant Application

Medina Tipton, project manager

DPH Budget Analyst

Purpose of Grant: (outline of grant activities allowable/required to be addressed in the application):

The Kentucky Department for Public Health (KDPH), HIV Branch proposes to implement electronic laboratory reporting of HIV laboratory data with special emphasis on CD4+ T-lymphocyte (CD4) test and viral load (VL) detection test results from both private and public laboratories to state and local health departments and CDC. The funding needed to establish ELR data feeds will be provided by the funding opportunity, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting".

With the enhancement of electronic lab reporting Kentucky plans to: 1) improve the electronic laboratory information system (e-LIS), OUTREACH, at the Division of Laboratory Services (DLS); and 2) the implementation of electronic lab reporting using an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from private and public entities. The Kentucky State Laboratory implemented OUTREACH in March 2010 with levels of security in compliance with federal and state regulations. The e-LIS provides 1500 registered users (which include state public health epidemiologists, local health departments, hospitals, correctional facilities and other state agencies) with the ease of electronic ordering which also incorporates a library that houses the demographics of return patients; and real-time report retrieval. The e-LIS enhancement of searching by test, will improve efficiency, reduce error from manual entry, and thus streamline surveillance reporting to state and federal entities.

KDPH intends to implement a model for HIV lab reporting which uses an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from external trading partners. After the payload is received and internalized an instance of an Orion Rhapsody interface engine is leveraged to process the ELR messages. This will be done by:

1. establishing the feasibility of secure ELR with ARUP and Quest by December 2010.
2. purchasing (8) additional connection point (ComPoint) licenses to support the present and future development of HIV laboratory reporting by December 2010.
3. contracting with Emergint Technologies, Inc. to standardize the terminology of HIV ELR from University of Kentucky Chandler Medical Center (UKCMC) and University of Louisville Hospital (U of L).

Amount of the Application Funds:

Federal Funds	\$72,898.98
Applicant Funds	0
State Funds	0
Local Funds	0
Other	0
Program Income	0
TOTAL FUNDS:	\$72,898.98

Budget Details (FederalShare):

Executive Summary of Cabinet for Health and Family Services Grant Application

Personnel	\$0
Fringe	\$0
Travel	\$0
Equipment	\$0
Supplies	\$0
Other	\$47,550
Contracts	\$25,348.98
Total Direct	\$72,898.98
Total Indirect	\$0
TOTAL FUNDS:	\$72,898.98

Last Status Report/Summary Included: N/A

Narrative Summary (summary document submitted with the grant): (detailed here)

The Kentucky HIV/AIDS Surveillance branch continues to seek advancement in improving the efficiency, timeliness and completeness of laboratory reporting. Per 902 KAR 2:020 requires that the HIV/AIDS Surveillance office receives a copy of every Elisa, western blot, PCR; HIV antigen or HIV culture; CD4 assay; HIV detectable viral load assay and a positive serologic test result for HIV infection done on persons who either live in or were tested/treated within the Commonwealth. This administrative regulation contributes to approximately 23,400 lab reports received annually by the office. Currently, there is one full time employee dedicated to the manual entry of all labs received from both private and public laboratories.

The Kentucky Department for Public Health (KDPH), HIV Branch proposes to implement electronic laboratory reporting of HIV laboratory data with special emphasis on CD4+ T-lymphocyte (CD4) test and viral load (VL) detection test results from both private and public laboratories to state and local health departments and CDC. The funding needed to establish ELR data feeds will be provided by the funding opportunity, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting".

With the enhancement of electronic lab reporting Kentucky plans to: 1) improve the electronic laboratory reporting module in place at the Kentucky State Laboratory; and 2) enhance the electronic lab reporting so that HIV/AIDS can be included in receiving these labs. The Kentucky State Laboratory began using OUTREACH in March 2010. The current version does not have lab search capabilities. To enhance the capability of OUTREACH to users, it will be vital to install test search filters. This will allow authorized users to type in the type of test they wish to extract with proper permissions.

KDPH intends to implement a model for HIV lab reporting which uses an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from external trading partners. After the payload is received and internalized an instance of an Orion Rhapsody interface engine is leveraged to process the ELR messages. This will be done by:

1. establishing the feasibility of secure ELR with ARUP and Quest by December 2010.
2. purchasing (8) additional connection point (ComPoint) licenses to support the present and future development of HIV laboratory reporting by December 2010.
3. contracting with Emergint Technologies, Inc. to standardize the terminology of HIV ELR from University of Kentucky Chandler Medical Center (UKCMC) and University of Louisville Hospital (U of L).

Contracts Anticipated Under this Grant: (list the vendor and the objectives/goals of the proposed contracted project, and the specified dollar amounts – use a separate sheet if necessary.)

Executive Summary of Cabinet for Health and Family Services Grant Application

1.) Emergint ELR Services

Total \$25,348.98

Emergint services are required to capture HIV laboratory results from the HL7 message traffic of the University of Kentucky and University of Louisville hospital systems. The extraction project will proceed in four (4) phases designed to capture HIV ELR and standardize them against the PHIN VADS vocabulary service. Standardized ELR will be forwarded, via PHIN MS, to the Rhapsody engine for processing and delivery to the HIV branch.

DATE TO THE FEDERAL GRANTING AGENCY: By 5p.m. Thursday, September 2, 2010

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received:

Completed by Grants.gov upon submission.

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State: 08/25/2010

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Kentucky Department for Public Health

* b. Employer/Taxpayer Identification Number (EIN/TIN):

61-0600439

* c. Organizational DUNS:

927049767

d. Address:

* Street1: 275 E. Main Street HS2E-C

Street2:

* City: Frankfort

County:

* State:

KY: Kentucky

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code: 40621

e. Organizational Unit:

Department Name:

Public Health

Division Name:

Epidemiology and Health Planni

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Ms.

* First Name: Medina

Middle Name:

* Last Name: Tipton

Suffix:

Title: HIV/AIDS Surveillance Coordinator

Organizational Affiliation:

KY Department for Public Health

* Telephone Number: 502-564-6539

Fax Number: 502-564-9865

* Email: medina.tipton@ky.gov

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

A: State Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Centers for Disease Control and Prevention

11. Catalog of Federal Domestic Assistance Number:

93.523

CFDA Title:

The Affordable Care Act: Human Immunodeficiency Virus (HIV) Prevention and Public Health Fund Activities

*** 12. Funding Opportunity Number:**

CDC-RFA-PS08-8020302SUPP10

* Title:

Guidance for Supplemental Funding to Funding Opportunity Announcement (FOA) PS08-802, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting"

13. Competition Identification Number:

NCHHSTP-NR

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

HIV/AIDS Surveillance: Enhancing Laboratory Reporting

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="72,898.98"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="72,898.98"/>

* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)

☐ Yes ☒ No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

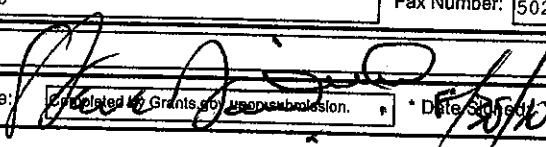
* Last Name:

Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative:  * Date Signed:

Authorized for Local Reproduction

Application for Federal Assistance SF-424

Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 4040-0006
Expiration Date 07/30/2010

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Enhanced Laboratory Reporting	93.523	\$ 72,898.98	\$	\$	\$	\$ 72,898.98
2.						
3.						
4.						
5. Totals		\$ 72,898.98	\$	\$	\$	\$ 72,898.98

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Enhanced Laboratory Reporting	(2)	(3)	(4)	
a. Personnel	\$ 0.00	\$	\$	\$	\$
b. Fringe Benefits	0.00				
c. Travel	0.00				
d. Equipment	0.00				
e. Supplies	0.00				
f. Contractual	25,348.98				25,348.98
g. Construction	0.00				
h. Other	47,550.00				47,550.00
i. Total Direct Charges (sum of 6a-6h)	72,898.98				72,898.98
j. Indirect Charges	0.00				
k. TOTALS (sum of 6i and 6j)	\$ 72,898.98	\$	\$	\$	\$ 72,898.98
7. Program Income	\$ 0.00	\$	\$	\$	\$

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Standard Form 424A (Rev. 7-97)

Prescribed by OMB (Circular A-102) Page 1A

SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. Enhanced Laboratory Reporting	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	0.00
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)	\$	\$	\$	\$	\$

SECTION D - FORECASTED CASH NEEDS				
Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal \$ 72,898.98	\$	\$	\$	\$ 72,898.98
14. Non-Federal				
15. TOTAL (sum of lines 13 and 14)	\$ 72,898.98	\$	\$	\$ 72,898.98

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT				
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$	\$	\$	\$
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	\$	\$	\$	\$

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges:	
22. Indirect Charges:	
23. Remarks:	

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Project Abstract

The Kentucky HIV/AIDS Surveillance branch continues to seek advancement in improving the efficiency, timeliness and completeness of laboratory reporting. Per 902 KAR 2:020 requires that the HIV/AIDS Surveillance office receives a copy of every Elisa, western blot, PCR; HIV antigen or HIV culture; CD4 assay; HIV detectable viral load assay and a positive serologic test result for HIV infection done on persons who either live in or were tested/treated within the Commonwealth. This administrative regulation contributes to approximately 23,400 lab reports received annually by the office. Currently, there is one full time employee dedicated to the manual entry of all labs received from both private and public laboratories.

The Kentucky Department for Public Health (KDPH), HIV Branch proposes to implement electronic laboratory reporting of HIV laboratory data with special emphasis on CD4+ T-lymphocyte (CD4) test and viral load (VL) detection test results from both private and public laboratories to state and local health departments and CDC. The funding needed to establish ELR data feeds will be provided by the funding opportunity, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting".

With the enhancement of electronic lab reporting Kentucky plans to: 1) improve the electronic laboratory reporting module in place at the Kentucky State Laboratory; and 2) the implementation of electronic lab reporting using an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from private and public entities. Improve the electronic laboratory information system, OUTREACH at the Division of Laboratory Services (DLS): The Kentucky State Laboratory implemented OUTREACH in March 2010 with levels of security in compliance with federal and state regulations. The electronic laboratory information system (e-LIS) provides 1500 registered users (which include state public health epidemiologists, local health departments, hospitals, correctional facilities and other state agencies) with the ease of electronic ordering which also incorporates a library that houses the demographics of return patients; and real-time report retrieval. The e-LIS enhancement of searching by test, will improve efficiency, reduce error from manual entry, and thus streamline surveillance reporting to state and federal entities.

KDPH intends to implement a model for HIV lab reporting which uses an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from external trading partners. After the payload is received and internalized an instance of an Orion Rhapsody interface engine is leveraged to process the ELR messages. This will be done by:

1. establishing the feasibility of secure ELR with ARUP and Quest by December 2010.
2. purchasing (8) additional connection point (ComPoint) licenses to support the present and future development of HIV laboratory reporting by December 2010.
3. contracting with Emergint Technologies, Inc. to standardize the terminology of HIV ELR from University of Kentucky Chandler Medical Center (UKCMC) and University of Louisville Hospital (U of L).

Need

The Kentucky HIV/AIDS Surveillance branch continues to embrace new technologies and advancements in improving the efficiency, timeliness and completeness of laboratory reporting. This is no small task as in 902KAR 2:020 Section 7 it is stated that the Kentucky HIV/AIDS surveillance office receives a copy of every Elisa, western blot, PCR; HIV antigen or HIV culture; CD4 assay; HIV detectable viral load assay and a positive serologic test result for HIV infection done on persons who either live in Kentucky or were tested/treated within the Commonwealth. This statute contributes to approximately 23,400 lab reports received annually by the office. Currently, there is one full time employee dedicated to the manual entry of all labs received from both private and public laboratories. With the enhancement of electronic lab reporting, this may free this position to shift into more core surveillance activities—such as entry of case reports into eHARS, aiding with investigations, etc.

Kentucky plans to: 1) improve the electronic laboratory information system (e-LIS), OUTREACH, at the Division of Laboratory Services (DLS); and 2) the implementation of electronic lab reporting using an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from private and public entities. The Kentucky Department for Public Health (KDPH), HIV Branch proposes to implement electronic laboratory reporting of HIV laboratory data with special emphasis on CD4+ T-lymphocyte (CD4) test and viral load (VL) detection test results from both private and public laboratories to state and local health departments and CDC. The funding needed to establish ELR data feeds will be provided by the funding opportunity, "HIV/AIDS Surveillance: Enhancing Laboratory Reporting". The initiatives outlined in this application will improve Completeness and Timeliness of cases. Also, by reducing staff time spent on manual lab entry, it will allow efforts to be focused on key needs such as investigation of NIR cases to determine risk factors; inadvertently helping to lower our large proportion of cases without reported risk factors.

Plan

Improve the electronic laboratory information system, OUTREACH at the Division of Laboratory Services (DLS): The Kentucky State Laboratory implemented OUTREACH in March 2010 with levels of security in compliance with federal and state regulations. The e-LIS provides 1500 registered users (which include state public health epidemiologists, local health departments, hospitals, correctional facilities and other state agencies) with the ease of electronic ordering which also incorporates a library that houses the demographics of return patients; and real-time report retrieval. The surveillance staff signed up for usernames and passwords to use this system and have received lab reports regularly. Although recently implemented, one area recognized for performance improvement in the system is data filtering by test name/code. This feature would enable more efficient surveillance by epidemiologists and laboratorians. This e-LIS enhancement will improve efficiency, reduce error from manual entry, and thus streamline surveillance reporting to state and federal entities. The vendor will complete the software changes on this query. This software change will be provided by the Psyche Corporation. Additional DLS staff will not be required to complete the in-house validation of this software change.

This will take place by first submitting a formal request to the vendor, Psyche Corporation, for the software enhancement to allow queries by test name or code to OUTREACH. The DLS information project manager, the DLS director and the vendor representative will work to implement production of the custom software enhancement. DLS will validate the queries to ensure that all final reports within a specific timeframe are accurate. Upon validation, the enhancement will be released for use by customers by December 2010.

The implementation of electronic lab reporting using an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from external trading partners: KDPH intends to implement a model for HIV lab reporting which uses an instance of the PHIN Messaging Subsystem to securely transport inbound electronic laboratory reports from external trading partners. After the payload is received and internalized an instance of an Orion Rhapsody interface engine is leveraged to process the ELR messages. If the inbound ELR are provided in batch [which is typically the case for a commercial lab, such as LabCorp] the Rhapsody engine decomposes the batch HL7 message into individual messages for structural and terminology validation against an HL7 validation filter and the PHIN Vocabulary Access and Distribution Service. After messages pass the validation step, they are mapped in to text files in preparation for batch import in to eHARS. This structure was based on the model currently used in Texas for their ELR.

Capacity

We have an infrastructure equivalent to what Texas is currently using and have secured a PHIN MS ELR exchange relationship with LabCorp in to our own instance of Orion Rhapsody, but have not leveraged the technology to support HIV ELR. We currently do not have similar exchange relationships with ARUP and Quest, both of which provide substantial volumes of paper-based laboratory reports that we would prefer to receive electronically.

In addition to our ELR work with LabCorp KDPH, cooperating with the Kentucky Hospital Association (KHA), has implemented a state-of-the-art ELR surveillance system in three (3) large metropolitan areas of Kentucky-Louisville, Lexington and Greater Cincinnati/Northern Kentucky. The components of our surveillance system are a transformation/rules engine and a transport system [PHIN Messaging Subsystem]. The purpose of the transformation/rules engine is to obtain and filter out hospital HL7 messages that contain information relevant to Kentucky reportable diseases. Once the electronic laboratory result is discovered in the hospital's HL7 traffic, it is extracted and reported to public health as an electronic laboratory report. Typically, the report is sent to an endpoint system [i.e. web-based disease surveillance system] for investigation and case confirmation; however, to support establishing HIV ELR, we propose directing the inbound ELR to an excel file required for eHARS importation. Using SAS, the excel spreadsheet will be compared to identifying information which is already entered into eHARS. Those which coincide with previously entered cases will be imported. Those who have no match to information in eHARS will be subject to case follow up procedures.

Annually, KDPH receives approximately 4,900 and 6,200 paper lab results from the University of Kentucky Chandler Medical Center (UKCMC) and University of Louisville Hospital (U of L), respectively. Both facilities reside in the regions where we are currently conducting active surveillance on hospital HL7 traffic and identifying messages associated with Kentucky

reportable diseases. UKCMC is under contract with the KHA to allow for the extraction of HL7 laboratory results, and associated demographics obtain through HL7 ADT messages. At this time, KHA does not have a contractual relationship with U of L to operate the same surveillance process working in UKCMC, hence, to move forward with HIV ELR reporting with U of L a contractual agreement will be established.

Proposed Objectives and Activities

1. KDPH will purchase and install test search filters into the Kentucky State Laboratory OUTREACH system by December 2010. This capability will be able to allow the HIV surveillance office to search for HIV only and co-morbid labs while limiting other users' access to HIV labs. Having this in place will allow for greater data analysis on the timeliness of reported cases from local health departments in the Commonwealth. This information can then be used to highlight any areas that may be deficient in reporting and work to improve outcomes. The DLS information project manager is responsible for ensuring the successful implementation of this custom software change by Psyche Corporation; validation studies performed at DLS; and cost management. The LIS project manager reports weekly to the laboratory director on the progress of this enhancement.
2. KDPH will establish the feasibility of secure ELR with ARUP and Quest by December 2010. The methodology and technology established for ELR from LabCorp is the example that will be used. However, since it is not known if these facilities are capable of sending ELR via PHIN MS, the first objective is to establish points of contact and identify their capacity to do so. If PHIN MS is used for secure transport, KDPH will create a PHIN MS route specific for each facility and exchange the appropriate SDN digital certificate information required to establish an encrypted connection between their PHIN MS sending queue and our receiving queue. If support is needed, KDPH will contact the PHIN MS support groups as needed. In the event one or both organizations do not use PHIN MS, a secondary method of file transfer, presumably secure FTP, will be evaluated.
3. KDPH will purchase additional connection point (ComPoint) licenses to support the present and future development of HIV laboratory reporting by December 2010. HIV ELR messages, received via PHIN MS, will be processed in to our Rhapsody engine for validation and mapping to the import file type required by eHARS. ComPoints will be used to connect ARUP, Quest, U of L and UKCMC first, and the additional ComPoints will be reserved for connecting additional sources (e.g. Mayo) of HIV ELR that are lower volume sites. The Cabinet for Health and Family Services has an established procurement mechanism with Orion, and will use it to acquire the additional ComPoint licenses.
4. KDPH will contract with Emergint Technologies, Inc. to standardize the terminology of HIV ELR from University of Kentucky Chandler Medical Center (UKCMC) and University of Louisville Hospital (U of L). Vocabulary will be acquired from the PHIN Vocabulary Access and Distribution Service (PHIN VADS) and used to inform the standardization process. The standardized ELR messages will retain their native 2.3.1 format, as this is presently the message structure in use by UKCMC and Uof L, however,

KDPH has the ability to map 2.3.1 message structure to 2.5.1 if needed. KDPH will enter in to a contractual arrangement with KHA to leverage their work in laboratory surveillance to also collect HIV laboratory results from UKCMC and Uof L. The contractual arrangement will include technology services provided by Emergint Technologies, Inc. to perform the extraction, standardization and submission of HIV ELR from UKCMC and U of L to KDPH's interface engine. Prior to implementing production message extraction from U of L, KDPH and KHA will jointly acquire the approval needed, via Participation and Business Association Agreements, to establish the exchange. These agreements are developed and active in seven (7) Kentucky hospitals for hospital-based ELR.

Timeline

All objectives with the exception of number 4 will be completed by December 31, 2010. This should be possible since the purchases of the CommPoint licenses and the OUTREACH test module are with providers for which we are already under contract. For objective two, it will require the locating of the proper personnel at Quest and ARUP and beginning talks between our ELR program personnel and the support staff at the two laboratories. Objective four will be slightly different in the fact that we will develop a new contract with Emergint Technologies, Inc. This will be completed by December 31st. However, the actual standardization of terminology will take place in 2011.

Performance measures

The HIV/AIDS surveillance office has records of how many labs were received since 2008 (in the paper format). As each laboratory company participates in HIV ELR with the KDPH, the surveillance staff will keep a record of the number of labs received. If there is a significant lessening in the number of labs, the ELR specialist will be contacted as well as the laboratories to investigate the discrepancy. The goal is to increase the number of labs reported, particularly from UKCMC and U of L. A second goal is to expedite the timeliness and completeness of reporting. With ELR, labs will be received faster enabling faster case follow up; and for established HIV/AIDS cases, reduce the time CD4 assays and viral loads are received.

Budget Narrative

OUTREACH

Total \$5,000.00

OUTREACH upgrade

\$5,000.00

Psyche Corporation, current vendor for DLS LIS, will perform software changes to enhance current electronic features by creating a query by "test" name/code for efficient surveillance and data gathering by public health officials. DLS is not in possession of the software license and therefore unable to install a query independent of the vendor.

Rhapsody Upgrade

Total \$42,550.00

KDPH has a production instance of the Orion Rhapsody Engine in place. All our Rhapsody ComPoint are in use by the communicable disease program. Additional ComPoints are required to support HIV ELR and must be purchased from Orion in bundles of 10. Rhapsody engine maintenance is determined by the total ComPoints licensed to the engine. With the addition of 10 ComPoints KDPH will require \$8,000.00 to cover the ComPoint maintenance fees for the 2010 – 2011 maintenance cycle. Custom development support is needed to build the routes to support delivery of HIV ELR to the HIV branch in a format consistent with the needs of eHARS. We also request funds to train a backup Rhapsody administrator and interface specialist.

Rhapsody Upgrade Components	Unit Cost	Units	Cost
Rhapsody per 10 CommPoint pack up to total of 50 CP's (\$2,000 per CP)	\$20,000	1	\$20,000
Custom development	\$195	50	\$9,750
Training	\$4,800	1	\$4,800
Annual maintenance	\$8,000	1	\$8,000
Rhapsody upgrade sub-total			\$42,550

Emergint ELR Services

Total \$25,348.98

Emergint services are required to capture HIV laboratory results from the HL7 message traffic of the University of Kentucky and University of Louisville hospital systems. The extraction project will proceed in four (4) phases designed to capture HIV ELR and standardize them against the PHIN VADS vocabulary service. Standardized ELR will be forwarded, via PHIN MS, to the Rhapsody engine for processing and delivery to the HIV branch.

Emergint ELR Services	Unit Cost	Units	Cost
Project Setup	\$108.54	8	\$868.32
Analysis (Project management)			\$868.32
Analysis: HIV Subscription			\$6,078.24
Analysis sub-total	\$108.54	64	\$6,946.56
Development (Project management)			\$1,085.40
Development: Message Transformation			\$2,604.96
Development: Message Destination Routing			\$1,736.64
Development: Content Vocabulary			\$6,078.24
Development sub-total	\$108.54	106	\$11,505.24
Testing (Project management)			\$434.16
Testing: Message Transformation			\$843.90
Testing: Message Vocabulary			\$2,362.92
Testing sub-total	\$86.69	42	\$3,640.98
Implementation (Project management)			\$868.32
Implementation: Installation			\$1,519.56
Implementation sub-total	\$108.54	22	\$2,387.88
Emergint ELR services sub-total	-	242	\$25,348.98

Total Direct costs

OUTREACH module = \$5,000.00
Orion Rhapsody Upgrade Components = \$42,550.00
Emergint ELR services = \$25,348.98

Total \$72,898.98



**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH**

Steven L. Beshear
Governor

275 East Main Street, HS2E-C
Frankfort, KY 40621
(502) 564-6539
Fax: (502) 564-9865
www.chfs.ky.gov

Janie Miller
Secretary

**OVERALL RESPONSIBLE PARTY (ORP) DESIGNATION AND CERTIFICATION REGARDING
COMPLIANCE WITH SECURITY STANDARDS FOR THE PROTECTION OF HIV
SURVEILLANCE INFORMATION & DATA FOR 2010**

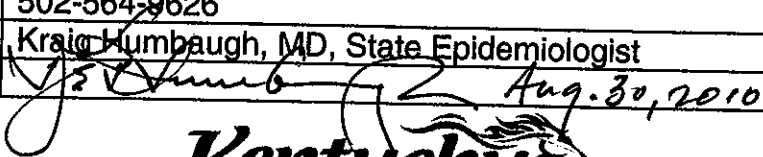
The undersigned official has been designated as the overall responsible party (ORP) by the funded organization. This official has accepted overall responsibility for implementing and enforcing the security standards established in Volume III: Security and Confidentiality Guidelines of CDC's Technical Guidance for HIV/AIDS Surveillance Programs and may be liable for breaches of confidentiality. This official has the authority to make decisions about surveillance operations that may affect programs outside the HIV surveillance unit and serves as one of the contacts to public health professionals and the HIV affected community on policies and practices associated with HIV surveillance.

By signing, the ORP certifies that in 2010 the applicant will comply with the "Technical Guidance for HIV/AIDS Surveillance Programs Volume III: Security and Confidentiality Guidelines" by:

a) Acknowledging that all "Program Requirements" included in the "Technical Guidance for HIV/AIDS Surveillance Programs Volume III: Security and Confidentiality Guidelines" have been implemented unless otherwise justified in an attachment to this statement."

b) Applying the Program Requirements" to all local/state/territorial staff and contractors funded through CDC to perform HIV surveillance activities.

c) Applying the "Program Requirements" at all sites where the HIV/AIDS Reporting System (HARS) or other HIV surveillance database is maintained.

Organizations Name:	Kentucky Department for Public Health Division of Epidemiology
Address:	275 E. Main Street Frankfort, KY 40621
Phone Number:	502-564-3418
Fax Number:	502-564-9626
Name and Title of ORP:	Kraig Humbaugh, MD, State Epidemiologist
ORP Signature:	 Aug. 30, 2010

